

ABSTRACT OF THE DISCLOSURE

The object of the present invention is to improve an access efficiency in a distributed environment. When a user "foo" access a file "file_1a" stored in a storage node SN1 under the control of a control node CN1 from a client CLN3 via a control node CN3 as shown by the solid lien arrow in the figure, a record of the access is accumulated in an access history of the control node CN1. If the control node CN1 refers to the access history and detects the frequent accesses from the control node CN3, it replicates or migrates the file "file_1a" to a storage node SN3 controlled by the control node CN3 as shown by the bold line arrow. The replication is performed if another device has accessed the file. Otherwise the migration is performed.